

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
24 July 2003 (24.07.2003)

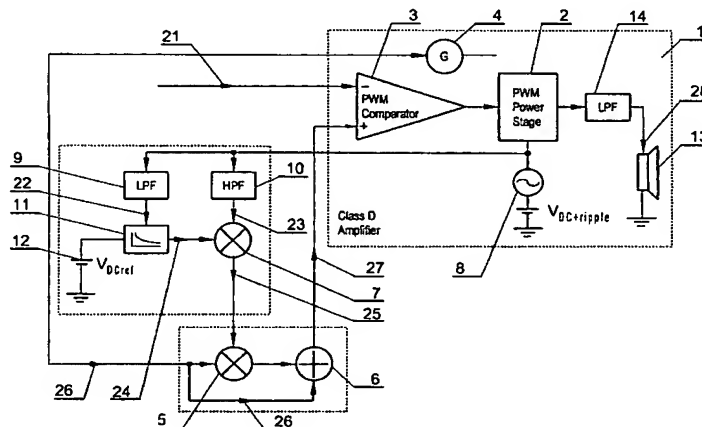
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(10) International Publication Number
WO 03/061117 A1

- (51) International Patent Classification⁷: **H03F 3/217**
- (21) International Application Number: PCT/PL03/00006
- (22) International Filing Date: 18 January 2003 (18.01.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
P-351783 21 January 2002 (21.01.2002) PL
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- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Declarations under Rule 4.17:**
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for all designations
 - as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations
 - of inventorship (Rule 4.17(iv)) for US only
- Published:**
- with international search report

[Continued on next page]

(54) Title: CLASS D ELECTROACOUSTIC AMPLIFIER AND METHOD FOR COMPENSATION OF POWER SUPPLY VOLTAGE INFLUENCE ON OUTPUT AUDIO SIGNAL IN CLASS D ELECTROACOUSTIC AMPLIFIER



(57) Abstract: In a class D electroacoustic amplifier (1) without feedback loop containing a supply voltage source (8), an amplifier low-pass filter (14), a power stage (2) controlled by a pulse width modulated signal, a saw-shaped voltage generator (4) and a comparator (3), to one of which inputs an audio signal is sent, while its second input is connected to the adder (6) of the compensation circuit of supply voltage influence on the output audio signal, to which a voltage from a reference voltage source is sent, a low-pass filter (9) and a high-pass filter (10) are connected to the supply voltage source (8), and the reference voltage source (12) is connected to an inverting circuit (11), whose input is connected to the low-pass filter (9) output, while the high-pass filter (10) output and the output of the inverting circuit (11) are connected to a multiplier (7), whose output is connected to the input of another multiplier (5), whose second input is connected to the saw-shaped voltage generator (4), and the multiplier (5) output is connected to one input of the adder (6) whose second input is connected to the saw-shaped voltage generator (4).

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— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

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PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference ADB25_PCT	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, Item 5 below.	
International application No. PCT/PL 03/ 00006	International filing date (day/month/year) 18/01/2003	(Earliest) Priority Date (day/month/year) 21/01/2002
Applicant ADVANCED DIGITAL BROADCAST POLSKA SP. Z O.O.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 04 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No.

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

1
☐ None of the figures.

INTERNATIONAL SEARCH REPORT

Internat

Application No

PCT/PL 03/00006

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H03F3/217

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H03F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 559 467 A (SMEDLEY KEYUE M) 24 September 1996 (1996-09-24) abstract ---	1
A	US 5 262 733 A (NAKAJIMA YASUFUMI ET AL) 16 November 1993 (1993-11-16) abstract; figures 1,3 ---	1
A	HANCOCK J: "A CLASS D AMPLIFIER USING MOSFETS WITH REDUCED MINORITY CARRIER LIFETIME*" JOURNAL OF THE AUDIO ENGINEERING SOCIETY, AUDIO ENGINEERING SOCIETY. NEW YORK, US, vol. 39, no. 9, 1 September 1991 (1991-09-01), pages 650-662, XP000226144 ISSN: 0004-7554 paragraph '01.1!; figure 1 ---	1

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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search -

18 June 2003

Date of mailing of the international search report

27/06/2003

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 160 896 A (MCCORKLE DAVID P) 3 November 1992 (1992-11-03) abstract; figure 2 -----	1

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No

PCT/PL 03/00006

Patent document cited in search report	Classification date	Patent family member(s)	Publication date
US 5559467	A	24-09-1996	NONE
US 5262733	A	16-11-1993	JP 4281606 A 07-10-1992 DE 69229973 D1 21-10-1999 DE 69229973 T2 27-04-2000 EP 0503571 A1 16-09-1992
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